

THE ZOOLOGIST:

A MONTHLY JOURNAL

OF

NATURAL HISTORY.

THIRD SERIES—VOL. XVI.

EDITED BY

J. E. HARTING, F.L.S., F.Z.S.,

MEMBER OF THE BRITISH ORNITHOLOGISTS' UNION.

DELECTANDO PARITERQUE MONENDO.

LONDON:

SIMPKIN, MARSHALL, HAMILTON, KENT & CO., LIMITED.

1892.

LONDON:

WEST, NEWMAN AND CO., PRINTERS,
54, HATTON GARDEN, E.C.



PREFACE.

WITH the issue of the December number the sixteenth volume of the present series of 'The Zoologist' is brought to a close.

The year 1892 has not been a remarkably eventful one for naturalists, although it may be predicted that in the annals of history it will be noted, according to precedent, as the year in which an extraordinary plague of Field Mice (*Arvicola agrestis*) overran the hill pastures of the south of Scotland. Some account of this was given in 'The Zoologist' for May last, supplemented in September by the Reports of Professor Loeffler, of Greifswald, on the experiments made by him with a view to combat a similar plague which has prevailed during the present year in Thessaly. In destroying these little pests, by digging out the nests and devouring the young, the great utility of the Rook has been well shown by our correspondent Mr. H. M. Bernard (p. 355), and was amply demonstrated in the evidence taken in Scotland by the Committee of the Board of Agriculture, whose Report on this subject is on the eve of publication.

Amongst birds which have attracted more than usual attention during the current year, two species may be especially mentioned, the Quail and the Ruddy Sheldrake. The former has been reported to have been met with by sportsmen in unusual numbers in September, and the discovery of more than an average number of nests with eggs has been also announced; the latter, hitherto regarded as a purely introduced species, has made its appearance in small flocks in so many different parts of the United Kingdom as to suggest the possibility of their being genuine immigrants, and not escaped birds. The evidence on the subject has been summarised and dealt with by Mr. F. M. Ogilvie (pp. 392—398).

In reviewing the *status* of the Girt Bunting (pp. 121, 174) and the Woodchat (p. 345) as British birds, Mr. O. V. Aplin has done good service, and it may be clearly seen from his statistics what is now the actual distribution of each.

Amongst the rarer birds met with during the year the following have been reported:—Spotted Eagle, Serin, Barred Warbler, Yellow-browed Warbler, Woodchat, Pectoral Sandpiper, Macqueen's Bustard, and Iceland and Sabine's Gulls. In Ireland the occurrence has been

noted of the Pink-footed Goose, Roller, Bee-eater, and Spotted Redshank.

The observations of the Rev. W. Warde Fowler (pp. 303—309) tend to prove that the Marsh Warbler (*Acrocephalus palustris*), hitherto regarded as a rare summer visitor to England, is in all probability an annual migrant, and either generally overlooked or confounded with its congener the Reed Warbler.

Dr. Klein's researches into the nature of the so-called grouse-disease have thrown a new light upon this obscure and much-debated epidemic, and his book on the subject, of which a notice has been given (pp. 337—341), should be read by every naturalist who is also a sportsman.

More attention than usual has been paid to the rarer British Bats, and to the smaller Mammalia generally, during the past twelve months, in consequence of which the geographical range of certain species has been extended, and useful additions made to our knowledge of their habits.

Reptiles and Batrachians, to the majority of observers, are never so attractive as other forms of life; we are all the more grateful, therefore, for such contributions as those of Mr. Norman Douglass and Mr. G. A. Boulenger.

Amongst Fishes, several marine species have been reported which are not commonly met with on our coasts, such as the Bonito, the Greenland Shark, the *Æquoreal Pipe-fish*, and the curious little *Leptocephalus morrisii*, two specimens of which were found by our observant correspondent Mr. Robert Warren, on the coast of Mayo.

Amongst Crustacea, also, the same observer has met with some uncommon forms on the coast of Sligo. Mr. Chichester Hart's 'Notes on the Marine Mollusca of Donegal,' extending through four numbers of this Journal, supply some useful additions to our knowledge of the distribution of species in Ireland.

Nor has Entomology been altogether neglected, notwithstanding the existence of Journals which are devoted to its consideration. The unusual abundance in 1892 of *Cynthia cardui* and *Tortrix viridana*, of the Mangel-wurzel Fly and the Mustard Beetle, has been duly noted and commented on.

The Editor, therefore, finds good cause to thank his contributors for the number and variety of their communications during the past year, and to express the hope that he may be similarly favoured during the year to come.

CONTENTS.

ALPHABETICAL LIST OF CONTRIBUTORS.

ADAMS, LIONEL E.
Observations on the Mole, 421

ANDERSON, JOSEPH, Jun.
Nesting of the Black Scoter in Sussex, 228

APLIN, O. V., M.B.O.U.
Notes on birds seen in Switzerland, 3, 65; Further remarks upon Grey Shrikes, 112; On the distribution of the Cirl Bunting in Great Britain, 121, 174; Supposed hybrid between Song Thrush and Blackbird, 145; Albinos and white varieties, 191; Supplementary notes on the birds of Oxfordshire, 241; On a black variety of the Water Vole, 281; Blue-headed Wagtail and Owl in Oxfordshire, 332; Status of the Woodchat in Great Britain, 345; Range of *Cinclus melanogaster pyrenaicus*, 359

ARCHIBALD, CHAS. F.
Nesting of the Chiffchaff, 226

AYRES, W. H. M.
Baillon's Crake in Hertfordshire, 27

BACKHOUSE, J.
Nesting of the Chiffchaff, 150

BANKS, WILLIAM
Eared Grebe in Anglesea, 411

BARRETT-HAMILTON, G. E. H.
Mus alexandrinus in Ireland, 75; Lesser Rorqual in Kerry, 75; Aequoreal Pipe-fish at Waterville, Co. Kerry, 77; Young Squirrel, 328

BARRINGTON, R. M., LL.D., F.L.S.
Greenland Falcon in Achill, 77

BATTERSBY, Mrs. FRANCES B.
Wild Geese and Starlings in Co. West Meath, 310; Shoveller breeding in Co. West Meath, 311

BENSON, Rev. CHARLES W., LL.D.
Willow Warbler in London, 363

BENSON, JOHN
Bittern in Co. Meath, 33

BERNARD, HENRY M.
Field Mice and Rooks, 355

BIDWELL, EDWARD
Eared Grebe in Norfolk, 358

BIRD, MAURICE C. H.
Hoopoe in Norfolk, 360

BORRER, WILLIAM, M.A., F.L.S.
The Black Viper of Markwick, 272

BOULENGER, G. A., F.Z.S.
An investigation into the variations of the Viper in Great Britain, 87

BRADSHAW, G. W.
Notes from Sussex, 428

BROWNSWORD, FRANK
Persistent brooding of the Ringed Plover, 31; Black Redstart in Lancashire, 115

BUNYARD, PERCY F.
A white Java Sparrow, 33

BURR, M.
Golden Oriole in Richmond Park, 269; Hoopoe in Surrey, 269; Quail in Sussex, 427

BUTLER, A. G., F.L.S.
Songs of birds reared from the nest, 30; Summer birds kept through the winter, 360; Breeding of the Cut-throat, or Ribbon Finch, 429

BUTTRESS, LEONARD
Puffin inland in Notts, 115; Natterer's Bat in Notts, 144; Pied Stoat in Notts in May, 310

CAMBRIDGE, Rev. O. P., M.A., F.Z.S.
Cirl Bunting in Dorsetshire, 230; Variety of Common Ringed Snake, 232

CAMPBELL, D. C.
Ruddy Sheldrake in Ireland, 350

CARPENTER, G. H.
Pycnogonida from the Sligo coast, 414

CHAMBERLAIN, WALTER, F.G.S.
On the occurrence of hybrids between the Red Grouse and Ptarmigan, 41; Stone in a horse's stomach, 421

CHARBONNIER, H.
Barbastelle in Gloucestershire, 329; Hairy-armed Bat in Yorkshire, 329; Buff variety of the Swallow and Flycatcher, 423

CHRISTY, MILLER, F.L.S.
Spotted Eagle in Essex, 76; on the extermination of the Rabbit in Australasia, 377

CHRISTY, THOMAS
Importation of Hares from New Zealand, 421

CLARKE, A. L.
Great Grey Shrike in Gloucestershire, 151

CLARKE, WM. J.
Bernacle Goose at Scarborough, 33; Whiskered Bat near Scarborough, 108; Ornithological notes from Scarborough, 144, 410; Badgers near Scarborough, 222; Polecats at Scarborough one hundred years ago, 222

COBURN, F.
Sabine's Gull near Bournemouth, 22; Ornithological notes from Worcestershire, 23; Grey Phalarope and Arctic Tern in Warwickshire, 26; Bernacle Goose at North Berwick, 33; Polecat in Worcestershire and Staffordshire, 402; Daubenton's Bat caught with a trout-fly, 408; Serotine Bat in the Midlands, 403

COCKS, ALFRED H., M.A., F.L.S.
"Vermi," paid for by churchwardens in a Buckinghamshire parish, 61

COOKE, S. V.
Ivory Gull in Co. Dublin, 228

CORBIN, G. B.
Hobby preying on Swallows, 26; Variation in plumage of Woodpeckers and Nuthatch, 35; Bittern in South-Western Hampshire, 229

CORDEAUX, JOHN
Rorqual in the Humber, 224; A recent visit to the Farne Islands,

293; On the migration of the Yellow Wagtail, 389; Migration in the Humber district in the autumn of 1892, 417; Garganey in Holderness, 424; Rare Wheatear seen near Spurn, 424; Barred Warbler in Holderness, 424

CORNISH, T. H.
Sabine's Gull in Cornwall, 22; Bonito on the Cornish coast, 36

COWARD, T. A.
Eared Grebe and Tufted Duck in Anglesea, 358

COWLEY, J. H. B.
Polecat in South Wales and Bucks, 354

CREAGHE-HAWARD, L.
Shrike killing Sand Martin, 310

DAVIES, S. A.
Nesting of Magpie, 29; A naturalist's ramble in Swedish Lapland, 81; Rough-legged Buzzard in Hants, 147

DOBBIER, J. K.
Blackbird pairing with Thrush, 270

DOUGLASS, G. NORMAN
Herpetology of the Grand Duchy of Baden, 15, 211

DOUGLAS, STUART STEWART
A brood of Pied Blackbirds, 358

ELLIOT, EDMUND A. S.
Rare birds at Kingsbridge, South Devon, 34; Young of Red-necked Grebe on the Kingsbridge Estuary in July, 331; Cuckoo in Grey Wagtail's nest, 331; White Wagtail in S. Devon, 408; Reed Warbler in S. Devon, 408; Woodchat in S. Devon, 412

ELLIOTT, J. STEELE
Additional notes on birds of Donegal, 128; Bitterns in Bedfordshire, 196; Woodcocks breeding in Worcestershire, 226; Turtle Dove nesting in a Squirrel's drey, 310; Ruddy Sheldrake in Co. Donegal, 311; *Tortrix viridana* in the Midlands, 313

ELLISON, REV. ALLAN
Nesting of the Great Crested Grebe in the North of Ireland, 425; Eared Grebes in Anglesea, 426

EVANS, H. A.
Earliest use of Foxhounds, 143; American Stint in N. Devon, 411; Ruddy Sheldrake in North Devon, 427

EVANS, WILLIAM
Young Squirrels, 403

FARN, A. B.
An albino Coot, 151

FAREN, WM.
Varieties of the Wild Duck, 227;
Variety of the King Duck, 269

FEILDEN, Col. H. W., F.Z.S.
Late appearance of Hirundinidæ in North Norfolk, 24; Heron catching a Rat, 110; Introduction of Ptarmigan into the Færöe Islands, 413; Sabine's Gull in Norfolk, 423

FOWLER, CHARLES
Nesting of the Black Scoter in Sussex, 151

FOWLER, Rev. W. WARDE, M.A.
Marsh Warbler in Oxfordshire, 303

GOLDSMITH, H. ST. B.
Hoopoe in Somersetshire, 409;
Uncommon birds in Somersetshire, 412

GODFREY, ROBERT
Ground-building birds removing egg-shells, 23; Note on the Black-headed Gull, 363

GORDON, Rev. Preb. H. D., M.A.
Rough-legged Buzzard in West Sussex, 22; Quail in Sussex, 361

GOSS, HERBERT, F.L.S.
Threatened spoliation of the New Forest, 73

GOULD, F. H. CARRUTHERS
Ruddy Sheldrake in North Devon, 426; Nesting of the Quail in Devonshire, 427; Manx Shearwater in Somersetshire, 427

GUNN, T. E.
Tufted Duck in Norfolk, 428

GURNEY, J. H., F.L.S., F.Z.S.
Ornithological notes from Norfolk, 56, 398; Greenland Shark at Overstrand, 312; Summer birds kept through the winter, 330; Food of the Jay, 429; Spotted Redshank in summer plumage in November, 429

HAIGH, G. H. CATON
Bottle-nosed Dolphin on the Lincolnshire coast, 21; Polecat in Merionethshire, 74, 108; White Wagtail in North Wales, 148; Motions of Divers on land, 329; Plague of *Tortrix viridana* in North Wales, 274; Eared Grebe in Merionethshire, 311; Ruddy Sheldrake in Lincolnshire, 360;

Yellow-browed Warbler in Lincolnshire, 413

HART, H. CHICHESTER, B.A., F.L.S.
Additions to the Avifauna of Donegal, 32, 108, 191, 270; Notes on Marine Mollusca collected on the coasts of Donegal and Dublin, 51, 105, 139, 181; Sand Martin in Co. Donegal, 270; Ruddy Sheldrake in Co. Donegal, 359; Black-tailed Godwit in Co. Donegal, 361; Iceland Gull in Lough Swilly, Co. Donegal, 412; Spirula, Ianthina, and Velella at Lough Swilly, Co. Donegal, 414

HARTING, J. E., F.L.S., F.Z.S.
Irish Natural History, 107; The British Marten, 131; Plague of Field Voles in the South of Scotland, 161; Plague of Field Voles in Thessaly, 310*; Memoir of the late H. W. Bates, 184; The Fox in Australia, 189; Deer in snow-drifts, 263; Wild hybrid birds, 335; Cause of Grouse disease, 337; Wolves in France, 354; Speed of homing Pigeons, 362; Nesting habits and food of the Long-eared Owl, 364; Large Carp in Sussex, 367; Presentation to the Rev. Leonard Blomefield, M.A., 420; Peahen assuming the male plumage, 428

HARVIE-BROWN, J. A., F.R.S.E.
Hybrid Teal and Wild Duck, 109, 148

HASTED, A.
White Partridges, 267

HEAD, FRANCIS
A tame Golden Eagle, 335

HEADLEY, ALEC GOLDNEY
Polecat in North Wiltshire, 20; Abundance of *Cynthia cardui* in South Hants, 273

JEFFREYS, CHARLES
Polecat in Pembrokeshire, 310; Sabine's Gull in Pembrokeshire, 423

JOHNSON, F. P.
Birds observed in a fishing expedition to South Trondhjem, 267

KEEN, J. H.
Birds on Queen Charlotte Island, British Columbia, 230

KINAHAN, G. H.
White and Pied Stoats, 265

LARKEN, E. P.
Varieties of the Jackdaw, 361;

Pied Wagtail with three broods, 362

LAVER, HENRY, F.L.S.

Delphinus tursio in the Colne, 265

LASCELLES, Hon. GERALD

On the change of colour in the Fallow Deer as observed in the New Forest, 352

LAWS, M. A.

Skylark singing at night, 362

LILFORD, Rt. Hon. Lord, F.L.S.

Polecat in Northamptonshire, 20, 224; Notes on the Ornithology of Northamptonshire in 1891, 201; Variety of *Grus cinerea* in Spain, 265

LODGE, G. E.

Marten in Surrey and Lincolnshire, 190; The Black Viper of Markwick, 312

LOEFFLER, Prof. E.

On epidemics amongst Mice kept at the Hygienic Institute at Griefswald, and on the best means of combating a plague of Field Mice, 297; The plague of Field Voles in Thessaly, and its successful counteraction by the *bacillus typhi murium*, 310*

MACPHERSON, A. HOLTE, M.A., F.L.S.

Albinism in birds and mammals, 191; Plumage of the Serin Finch, 224; Winter notes from Switzerland and North Italy, 258; Earliest use of Foxhounds, 264

MACPHERSON, Rev. H. A., M.A.

Osprey in Lakeland, 75; Earliest use of Foxhounds, 224; On a black variety of the Water Vole, 281

MANN, T. J.

Nesting habits and food of the Long-eared Owl, 363

MARSDEN, H. W.

Nidification of the Bar-tailed Godwit, 30

MATHEW, Rev. MURRAY A., M.A.

Rare birds in North Devon, 27; Polecat in Pembrokeshire, 310

MATTHEWS, Rev. A., M.A.

Albino Squirrel, 20; Grey Phalarope in Leicestershire, 26

MOFFAT, C. B.

Birds of the Isle of Man, 146; Marten in Co. Wexford, 263

MORE, A. G., F.L.S.

Alleged former nesting of the Osprey in the English Lake District, 1; Parrot Crossbill in Ireland, 76

NEAVE, NEWMAN

Fork-tailed Petrel near Macclesfield, 429

NICHOLSON, W. A.

Protection of birds, 271

NORMAN, R. W.

Great Northern Diver in Donegal in August, 192

OGILVIE, F. MENTEITH, M.A., F.Z.S.

Long-tailed Duck off Suffolk coast in summer, 109; Iceland Gull near Aldeburgh, 114; on the occurrence in the British Islands of the Ruddy Sheldrake, 392

OLDHAM, CHARLES

The Gisburne herd of Wild White Cattle, 143; Palmated Newt in Anglesea, 272; Supposed occurrence of the Purple Heron in Lancashire, 428

PARKIN, THOMAS, M.A., F.Z.S.

Woodchat and Bittern in Sussex, 229

PATTERSON, ROBERT

Grey Phalarope in Ireland, 26; Pink-footed Goose in Ireland, 33; Roller in Co. Donegal, 33; Fork-tailed Petrel in Ireland, 33

PHILLIPS, E. CAMBRIDGE, F.L.S.

Polecat in Pembrokeshire, 264

PIDSLEY, WM. E. H.

Grey Phalarope in Devon, 28; Serin Finch in Devonshire, 114; Buffon's Skua and Bittern in Devon, 145; Notes from Devonshire, 427

POPHAM, H. LEYBORNE

Iceland Gull in Kinsale Harbour, 662

PRATT & SON

Spotted Eagle in Suffolk, 25

RAEBURN, HAROLD

Herring-fishing at Christiana, 312

RAMSBOTHAM, R. H.

Large stone in a horse, 402

RALFE, P.

Petrels and Phalarope in the Isle of Man, 28; Birds of the Isle of Man, 93

READ, ROBERT H.

Chiffchaff wintering in Somerset, 111; Unusual nesting of the Chiffchaff, 111

RIDGE, JOHN

A white American Red-breasted Thrush, 227

ROBERTS, T. VAUGHAN
Bank Vole breeding in confinement, 329

RUDGE, W. A.
Results of Viper bite, 336

SERVICE, ROBERT
Grasshopper Warbler in S.W. Scotland, 333; Late nesting of the Lapwing, 333; Lapwings carrying their young, 360; Risso's Grampus in the Solway, 404; Late nesting of the Tawny Owl in Scotland, 424

SOUTHWELL, T., F.Z.S.
Marten in Norfolk and Suffolk, 19; Notes on the Seal and Whale Fishery of 1891, 100; Greenland Shark at Lynn, 153; Siberian Pectoral Sandpiper in Norfolk, 356, 405

STEWART, DOUGLAS STUART
A brood of Pied Blackbirds, 358

STOTT, C. E.
Spotted Crake in S.W. Lancashire, 361

SUTTON, JAMES
Marten and Wild Cat, 223; Pied Rook, 228

SWAINSON, Capt. E. A.
An unidentified water-bird, 151

SWAYSLAND, H.
Great Northern Diver off Brighton, 27

TERRY, HORACE
Curlews migrating, 112

THORPE, D. LORT
Imitative powers of the Starling, 192

TUCK, Rev. JULIAN G., M.A.
Raptorial migrants in East Anglia, 29, 114; Buffon's Skua in West Suffolk, 30; White Wagtail in Suffolk, 192; Birdsnesting in Suffolk, 311

TUCK, W. H.
Bullfinches in Kensington Gardens, 144

USSHIER, R. J.
Ruddy Sheldrake in Ireland, 334

VERNER, Capt. WILLOUGHBY
Stone Curlew in Kent, 24; Kentish Plover, 24

VYSE, H. HOWARD
Ruddy Sheldrake in Buckinghamshire, 359

WADDILOVE, E. G.
Ivory Gull in Co. Dublin, 228

WAITE, EDGAR R.
Albinos and white varieties, 25

WALKER, Rev. F. A., D.D.
Churchwardens' accounts at Dry Drayton, Cambs., 189

WARREN, ROBERT
Pipe-fishes in Cork Harbour and Killala Bay, 153; Leptocephalus Morrisii at Killala Bay, 154; Iceland Gulls and Wild Swans in the Moy Estuary, 193; Supposed occurrence of Ivory Gull in Co. Dublin, 266; Nympon and Caprella on the coast of Sligo, 367; Fulmar Petrel on the Irish coast, 406; Pomatorhinus Skua and Fulmar Petrel in Mayo, 423

WEIR, J. JENNER, F.L.S.
Albinism in birds and mammals, 141

WHEELER, E. G.
Marked Woodcocks, 427

WHITAKER, J., F.Z.S.
Ruff in Nottinghamshire, 423

WHITLOCK, F. B.
Pallas's Grey Shrike in Notts and Leicestershire, 76; Notes from Norfolk in 1891, 195; Black variety of Water Vole in Northumberland, 329; Birds of Derbyshire, 331; Marsh Warbler in Notts, 332

WILLIAMS, EDWARD
Red-necked Phalarope in Ireland, 28; Spotted Redshank in Co. Dublin, 35; Ruddy Sheldrake in Co. Dublin, 359; Bee-eater in Co. Wicklow, 428; Honey Buzzard in Co. Wexford, 428

WINGE, HERLUF
On the breeding of the Sand Grouse in captivity in Denmark, 341

WITCHELL, CHARLES A.
Inherited bird-song, 77; Variations of the Viper, 152; Barbastelle in Gloucestershire, 356

YELLOWLY, WILLIAM
Wild Cat in the West of Scotland, 190

YOUNG, J., F.L.S., F.Z.S.
Song of the Redpoll, 149; Unusual nesting-place for a Magpie, 227; Reminiscence of the Kite in Bucks, 282

ALPHABETICAL LIST OF SUBJECTS.

Accounts, Churchwardens', at Hambleton, Bucks, 61; at Dry Drayton, Cambs., 189

Albinism, in birds and mammals, 141, 191

Albino Coot, 151; Squirrel, 20

Albinos and white varieties, 25, 191

Avifauna of Donegal, additions to, 32, 108, 128, 191, 270

Badgers near Scarborough, 222

Barbastelle in Gloucestershire, 329, 356

Bat, Daubenton's, caught with a trout-fly, 403; Hairy-armed, in Yorkshire, 329; Natterer's, in Notts, 144; Serotine, in the Midlands, 403; Whiskered, near Scarborough, 108

Bates, H. W., memoir of the late, 184

Bee-eater in Co. Wicklow, 428

Beetle, Mustard, 274

Bird-song, 80; inherited, 77

Birds, seen in Switzerland, notes on, 3, 65; ground-building, removing egg-shells, 28; rare, in N. Devon, 27,—at Kingsbridge, S. Devon, 34; songs of, reared from the nest, 30; of Donegal, additions to, 32, 108, 128, 191, 270; of Isle of Man, 93, 146; and mammals, albinism in, 141, 191; in Queen Charlotte Island, British Columbia, 280; of Oxfordshire, supplementary notes on, 241; observed on a fishing expedition to South Trondhjem, 267; protection of, 271; summer, kept through the winter, 330, 360; of Derbyshire, 331; wild hybrid, 335; uncommon, in Somersetshire, 412

Birdsnesting in Suffolk, 811

Bittern in Co. Meath, 33,—in Devon, 145,—in Bedfordshire, 196,—in S.W. Hampshire, 229,—in Sussex, 229

Blackbird, pairing with Thrush, 270; and Song Thrush, supposed hybrid between, 145

Blackbirds, a brood of pied, 858

Blomefield, Rev. Leonard, M.A., presentation to, 420

Bonito on the Cornish coast, 36

BOOKS REVIEWED:—

Poultry for the Table and Market *versus* Fancy Fowls, with an Exposition of the Fallacies of Poultry Farming, by W. B. Tegetmeier, 238

Songs of Universal Life, by the Rev. Marcus S. C. Rickards, 239

Beast and Man in India, a popular sketch of Indian Animals in their relations with the People, by J. L. Kipling, 313

Palms and Pearls, or Scenes in Ceylon, by Alan Walters, 318

Travels amongst the Great Andes of the Equator, with Supplementary Appendix, by Edward Whymper, 368

The Naturalist in La Plata, by W. H. Hudson, 373

A Vertebrate Fauna of Lakeland, including Cumberland and Westmorland, with Lancashire north of the Sands, by Rev. H. A. Macpherson, with a Preface by R. S. Ferguson, 436

The Birds of Devon, by W. S. M. D'Urban and Rev. Murray A. Mathew, 438

The Fauna and Flora of Gloucestershire, by C. A. Witchell and W. B. Strugnell, 441

Catalogue of Eastern and Australian Lepidoptera-Heterocera in the Collection of the Oxford University Museum, by Col. C. Swinhoe, 446

Les Coquilles Marines des Côtes de France, 447

Breeding of Woodcock in Worcestershire, 245; of Shoveller in Co. West Meath, 311; of Bank Vole in confinement, 329; of Sand Grouse in captivity in Denmark, 341; of Canary in Germany, 366; of Cut-throat, or Ribbon Finch, 429

Brooding, persistent, of Ringed Plover, 81

Bullfinches in Kensington Gardens, 144

Bunting, Cirl, distribution in Great

Britain, 121, 174,—in Dorsetshire, 230
 Buzzard, Honey, in Co. Wexford, 428; Rough-legged, in W. Sussex, 22,—in E. Anglia, 29; in Hants, 147
 Canary-breeding in Germany, 366
 Caprella on the coast of Sligo, 367
 Carp, large, in Sussex, 367
 Cat, Wild, in West of Scotland, 190,—in Scotland, 223
 Cattle, Wild White, Gisburne herd of, 143
 Chiffchaff, wintering in Somerset, 111,—unusual nesting of, 111, 150, 226
 Churchwardens' accounts, at Hambleton, Bucks, and vermin paid for, 61; at Dry Drayton, Cambridgeshire, 189
Cinclus melanogaster pyrenaicus, 359
 Coot, albino, 151
 Crake, Baillon's, in Hertfordshire, 27; Spotted, in S.W. Lancashire, 361
 Crossbill, Parrot, in Ireland, 76
 Cuckoo in Grey Wagtail's nest, 331
 Curlew, Stone, in Kent, 24
 Curlews, in Worcestershire, 23; migrating, 112
 Cut-throat, or Ribbon Finch, breeding of, 429
Cynthia cardui, abundance in South Hants, 273
 Deer, in snowdrifts, 263; Fallow, change of colour in, as observed in the New Forest, 352
Delphinus tursio in the Colne, 265
 Diver, Great Northern, off Brighton, 27,—in Donegal in August, 192
 Divers, motions of, on land, 226
 Dolphin, Bottle-nosed, on the Lincolnshire coast, 21; in the Colne, 265
 Dove, Turtle, nesting in a Squirrel's drey, 310
 Duck, Eider, farm, 364; King, variety of, 269; Long-tailed, off Suffolk coas, in summer, 109; Tufted, in Anglesea, 358,—in Norfolk, 428
 Eagle, Golden, a tame, 335; Spotted, in Suffolk, 25, 29,—in Essex, 76
 Exportation of Larks and Thrushes, 409
 Falcon, Greenland, in Achill, 77
 Fallow Deer, change of colour in, as observed in the New Forest, 352
 Farne Islands, a recent visit to, 293
 Feeding wild Sea Gulls, Jackdaws and Pigeons, 21
 Finch, Serin, in Devonshire, 114,—plumage of, 224
 Fly, Mangel Wurzel, 273
 Flycatcher, Spotted, buff variety, 423
 Food of Long-eared Owl, 363; of Jay, 429
 Fox in Australia, 189
 Foxhounds, earliest use of, 143, 224, 264
 Garganey in Holderness, 429
 Geese, Wild, in West Meath, 310
 Godwit, Bar-tailed, nidification of, 30; Black-tailed, in Co. Donegal, 361
 Goose, Barnacle, at North Berwick, 33,—at Scarborough, 33; Pink-footed, in Ireland, 32, 33
 Grampus, Risso's, in the Solway, 404
 Grebe, Eared, in Merionethshire, 311,—in Norfolk, 358,—in Anglesea, 358, 411, 426; Great Crested, in N. Devon, 28,—nesting in North of Ireland, 426; Red-necked, young of, on Kingsbridge Estuary in July, 331
 Ground-building birds removing egg-shells, 23
 Grouse, Red, and Ptarmigan, hybrids between, 41; Sand, breeding in captivity in Denmark, 341
 Grouse-disease, cause of, as explained by Dr. Klein, 337
Grus cinerea, variety, in Spain, 265
 Gull, Black-headed, note on, 363; Iceland, near Aldeburgh, 114,—in Moy Estuary, 193,—in Kinsale Harbour, 266,—on Lough Swilly, Co. Donegal, 412; Ivory, in Co. Dublin, 228, 266; Sabine's, near Bournemouth, 22,—in Cornwall, 22,—in S. Devon, 34,—in Norfolk, 428,—in Pembrokeshire, 428
 Gulls, wild Sea, Jackdaws, and Pigeons feeding, 21
 Habits, nesting, of Long-eared Owl, 363
 Hares, importation of from New Zealand, 421
 Harrier, Hen, in E. Anglia, 29
 Heron, catching a Rat, 110; Purple, supposed occurrence in Lancashire, 428

Herpetology of the Grand Duchy of Baden, 15, 211
 Herring-fishing at Christiania, 312
 Hirundinidae, late appearance in N. Norfolk, 24
 Hobby, preying on Swallows, 26
 Hoopoe in Surrey, 269,—in Norfolk, 360,—in Somersetshire, 409
 Horse, stone in stomach of, 402, 421
 Hybrid, between Red Grouse and Ptarmigan, 41; between Teal and Wild Duck, 109, 148; supposed, between Song Thrush and Blackbird, 145; wild birds, 385

Ianthina, at Lough Swilly, Co. Donegal, 414
 Importation of Hares from New Zealand, 421

Jackdaw, feeding with wild Sea Gulls and Pigeons, 21; varieties of, 361
 Java Sparrow, a white, 33
 Jays, food of, 429

Lacerta muralis, 19
 Lapwings, carrying their young, 360
 Lark, Sky, singing at night, 362

Magpie, nesting of, 29,—unusual nesting-place for, 227
 Mammals and birds, albinism in, 141, 191
 Marten, British, 131,—in Norfolk, 19,—in Suffolk, 19,—in Surrey, 190,—in Lincolnshire, 190,—in Cumberland, 223,—in Co. Wexford, 263
 Martin, Sand, in Co. Donegal, 270;
 Shrike killing, 310
 Merlin, 23
 Memoir of the late H. W. Bates, 184
 Mice, kept at the Hygienic Institute at Greifswald, on epidemic amongst, 297; Field, on the best means of combating a plague of, 297,—and Rooks, 355
 Migrants, raptorial, in East Anglia, 29, 114
 Migration, of Yellow Wagtails, 389;
 in Humber district in autumn of 1892, 417
 Mole, observations on the, 421
 Mollusca, Marine, collected on the coasts of Donegal and Dublin, notes on, 51, 105, 139, 181
 Motions of Divers on land, 226
 Mus alexandrinus in Ireland, 75

Natural History, Irish, 107
 Nest of Grey Wagtail, Cuckoo in, 331
 Nesting, alleged former, of Osprey in the English Lake district, 1; of Magpie, 29,—unusual, 227; unusual, of Chiffchaff, 111, 150, 226; of Black Scoter in Sussex, 151, 228; of Turtle Dove in a Squirrel's drey, 310; late, of Lapwing, 333; habits and food of Long-eared Owl, 363; late, of Tawny Owl in Scotland, 424; of Great Crested Grebe in North of Ireland, 425; of Quail in Devonshire, 427

New Forest, threatened spoliation of, 73
 Newt, Palmated, in Anglesea, 272
 Nidification of Bar-tailed Godwit, 30
 Notes, on Marine Mollusca collected on the coasts of Donegal and Dublin, 51, 105, 139, 181; on the Seal and Whale fishery of 1891, 100; ornithological, from Switzerland, 3, 65, 258,—from Worcestershire, 23,—from Norfolk, 56, 195, 398,—from Donegal, 108, 191,—from Scarborough, 144, 410,—from Northamptonshire, 201,—from Oxfordshire, 241,—from North Italy, 258,—from Devonshire, 427,—from Sussex, 428
 Nuthatch, variation in plumage, 35
 Nymphon on the coast of Sligo, 367

Oriole, Golden, in Richmond Park, 269
 Ornithological notes (see Notes)
 Osprey, alleged former nesting in the English Lake district, 1; in Lakeland, 75
 Owl, Little, in Oxfordshire, 332;
 Long-eared, nesting habits and food of, 363; Tawny, late nesting, in Scotland, 424

Pairing of Blackbird with Thrush, 270
 Partridge, white, 267
 Peahen assuming the male plumage, 428
 Peregrine, 29
 Petrel, Fork-tailed, in Ireland, 33,—near Macclesfield, 429; Fulmar, on the Irish coast, 406,—in Co. Mayo, 423
 Petrels in Isle of Man, 28
 Phalarope, Grey, in Leicestershire, 26,—in Warwickshire, 26,—in Ire-

land, 26,—in Isle of Man, 28,—in Devon, 28, 84,—in Donegal, 32; Red-necked, in Ireland, 28

Pigeons feeding with Sea Gulls and Jackdaws, 21; Homing, speed of, 362

Pipe-fish, *Aequoreal*, at Waterville, Co. Kerry, 77,—in Cork Harbour and Killala Bay, 153

Plague of Field Voles in the South of Scotland, 161; in Thessaly, and its successful counteraction by the *bacillus typhae murium*, 310*; of Field Mice, best means of combating a, 298; of *Tortrix viridana* in N. Wales, 274

Plover, Kentish, 24; Ringed, persistent brooding of, 31

Plumage, of Woodpecker and Nut-hatch, variation in, 35; of Serin Finch, 224; male, assumed by Peahen, 428

Polecat, in North Wiltshire, 20,—in Northamptonshire, 20, 224,—in Merionethshire, 74, 108,—in Scarborough one hundred years ago, 222,—in Pembrokeshire, 264, 310, 328,—in S. Wales, 354,—in Bucks, 354,—in Staffordshire, 402,—in Worcestershire, 402

Protection of birds, 271

Ptarmigan, introduction of into the Færöe Islands, 413,—and Red Grouse, hybrids between, 41

Puffin inland in Notts, 115

Pycnogonida from the Sligo coast, 414

Quail in Sussex, 361, 427,—nesting in Devonshire, 427

Rabbit, on the extermination of, in Australasia, 377

Ramble, a naturalist's, in Swedish Lapland, 81

Raptorial migrants in East Anglia, 29, 114

Rat, Heron catching a, 110

Rats stealing gooseberries, 354

Redpoll, song of, 149

Redshank, Spotted, in N. Devon, 27,—in Co. Dublin, 35,—in summer plumage in November, 429

Redstart, Black, in Lancashire, 115

Ring Ouzel, 28

Roller in Co. Donegal, 32, 33

Rooks, Pied, 228; and Field Mice, 355

Rorqual, in the Humber, 224; Lesser, in Kerry, 75

Ruff, in Nottinghamshire, 423

Sandpiper, Siberian Pectoral, in Norfolk, 356, 405

Scoter, Black, nesting in Sussex, 151, 228; Surf, in S. Devon, 35

Sea-Gulls, wild, feeding with Jackdaws and Pigeons, 21

Seal and Whale fishery of 1891, notes on, 100

Shark, Greenland, at Lynn, 153,—at Overstrand, 312

Shearwater, Manx, in N. Devon, 28

Shoveller, Manx, in Somersetshire, 427

Sheldrake, Ruddy, in Co. Donegal, 311, 359,—in Ireland, 334, 359,—in Scotland, 334,—in Hants, 335,—in Suffolk, 335,—in Cumberland, 335,—in Co. Dublin, 359,—in Buckinghamshire, 359,—in Lincolnshire, 360,—on the recent occurrence in the British Islands, 392,—in North Devon, 426, 427

Shoveller, breeding in Co. West Meath, 311

Shrike, Great Grey, in Gloucestershire, 151; Pallas's Grey, in Notts, 76,—in Leicestershire, 76; killing Sand Martin, 310

Shrikes, Grey, further remarks upon, 112

Skua, Buffon's, in N. Devon, 27,—in W. Suffolk, 30,—in Devon, 34, 145; Pomatorhine, in Co. Mayo, 428

Snake, Common or Ringed, variety of, 232

SOCIETIES, SCIENTIFIC:—

- Linnean, 36, 78, 115, 154, 196, 233, 274, 430
- Zoological, 37, 79, 118, 156, 197, 234, 277, 432.
- Entomological, 39, 80, 119, 158, 198, 236, 280, 414, 444

Songs of birds, 30, 77

Spirula, at Lough Swilly, Co. Donegal, 414

Squirrel, albino, 20; young, 328, 403

Starling, 28,—imitative powers of, 192,—in Co. West Meath, 310

Stoat, white and pied, 265; pied, in Notts in May, 310

Stint, American, in N. Devon, 411

Stone in a Horse's stomach, 402, 421

Swallow, buff variety of, 428

Swallows, Hobby preying on, 26

Swans, Wild, in the Moy Estuary, 198
 Supplementary notes, on the birds of Donegal, 32, 108, 128, 191, 270; on the birds of Oxfordshire, 241

Teal and Wild Duck, hybrid between, 109, 148

Tern, Arctic, in Warwickshire, 26,— in Devon, 34; Common, in Devon, 34

Thrush, pairing with Blackbird, 270; American Red-breasted, a white, 227; Song, and Blackbird, supposed hybrid between, 145

Thrushes, exportation of, 409

Tortrix viridana, plague of, in N. Wales, 274; in the Midlands, 313

Varieties, white and albinos, 25; of Wild Duck, 227; of Stoat, 265; of Jackdaws, 361

Variety, white, of American Red-breasted Thrush, 227; of Common or Ringed Snake, 232; of *Grus cinerea*, in Spain, 265; of King Duck, 269; black, of Water Vole, 281,— in Northumberland, 329; pied, of Blackbird, 358; buff, of Spotted Flycatcher, 423; of Swallow, 423

Vellella, at Lough Swilly, Co. Donegal, 414

"Vermin," paid for by Churchwardens in a Buckinghamshire parish, 61

Viper, an investigation into the variations of, in Great Britain, 87, 152; of Markwick, 272, 312

Viper-bite, results of, 336

Vole, Bank, breeding in confinement, 329; Field, plague of, in the South of Scotland, 161,— in Thessaly, 310; Water, black variety, 281,— in Northumberland, 329

Warbler, Barred, in Holderness, 424; Grasshopper, in S.W. Scotland, 333; Marsh, in Oxfordshire, 303,— in Notts, 332; Reed, in S. Devon, 408; Willow, in London, 363; Yellow-browed, in Lincolnshire, 413

Wagtail, Blue-headed, in Oxfordshire, 332; Grey, Cuckoo in nest of, 331; Pied, with three broods, 362; White, in North Wales, 148,— in Suffolk, 192,— in S. Devon, 408; Yellow, migration of, 389

Water-bird, an unidentified, 151

Whale and Seal fishery of 1891, notes on, 100

Wheatear, rare, seen near Spurn, 424

White varieties and albinos, 25, 191

Wild, Sea-Gulls feeding with Jackdaws and Pigeons, 21; White Cattle, Gisburne herd of, 143; Cat, in Cumberland, 228,— in W. Scotland, 190; Swans in Moy Estuary, 193; Duck, varieties of, 227,— and Teal, hybrid between, 109, 148; Geese, in Co. West Meath, 310; hybrid birds, 335

Winter notes from Switzerland and North Italy, 258

Wolves in France, 354

Woodchat, in Sussex, 229; status of in Great Britain, 345; in S. Devon, 412

Woodcocks, breeding in Worcestershire, 226; marked, 427

Woodpeckers, variation in plumage of, 35

Zamenis viridiflavus, 19



